

What is claimed is:

1. A liquid ejection control method for controlling ejection of liquid from nozzles for ejecting liquid onto a medium that is fed in a predetermined feed direction, comprising the following steps:

a step of detecting a portion of said medium that is positioned on an upstream side in said feed direction; and

a step of making nozzles, among a plurality of nozzles, that are located on the upstream side in said feed direction not eject liquid based on a result of said detection.

2. A liquid ejection control method according to claim 1, wherein said nozzles that are located on the upstream side in said feed direction are a nozzle located most upstream in said feed direction and nozzles within a predetermined distance in said feed direction from said nozzle.

3. A liquid ejection control method according to claim 2, wherein after said portion of said medium that is positioned on the upstream side in said feed direction has been detected, a step of feeding said medium in said feed direction and a step of moving an ejection head provided with said plurality of nozzles and ejecting liquid onto said medium are repeated a predetermined number of times, and then ejection of liquid onto said medium is ended.

4. A liquid ejection control method according to claim 3, wherein said predetermined number of times is a plurality of times, and

wherein said predetermined distance is increased in said step of ejecting liquid onto said medium, in correspondence with an increase of an aggregate paper feed amount of said medium after said portion of said medium that is positioned on the upstream side in said feed direction has been detected.

5. A liquid ejection control method according to claim 4, wherein said predetermined distance is an amount obtained by subtracting a predetermined amount from said aggregate paper feed amount.

6. A liquid ejection control method according to claim 5, wherein, the higher a detection precision for detecting said portion of said medium that is positioned on the upstream side in said feed direction is, the smaller said predetermined amount is.

7. A liquid ejection control method according to claim 6, wherein said portion of said medium that is positioned on the upstream side in said feed direction is detected by determining whether or not an end, among ends of said medium, positioned on the upstream side in said feed direction has passed a predetermined position in said feed direction.

8. A liquid ejection control method according to claim 7, wherein whether or not said end, among the ends of said medium, positioned on the upstream side in said feed direction has passed said predetermined position in said feed direction is determined by determining whether or not said medium is present in a direction of travel of light that is emitted from a light

emitting member for emitting light toward a medium support section, based on an output value of a light-receiving sensor for receiving the light that has been emitted by said light emitting member.

5 9. A liquid ejection control method according to claim 8,  
wherein said light is emitted from said light emitting  
member toward a plurality of different positions in a  
main-scanning direction, each of said plurality of different  
positions being said predetermined position in said feed  
10 direction on said medium support section, and

wherein whether or not said medium is present in said  
direction of travel of said light is determined based on output  
values of said light-receiving sensor that has received said light  
having been emitted.

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10. A liquid ejection control method according to claim 9,  
wherein, while making a moving member that is provided with  
said light emitting member and said light-receiving sensor and  
that can be moved in the main-scanning direction move in the  
20 main-scanning direction,

said light is emitted from said light emitting member  
toward the plurality of different positions in the  
main-scanning direction, each of said plurality of  
different positions being said predetermined position in  
25 said feed direction on said medium support section, and

whether or not said medium is present in said  
direction of travel of said light is determined based on  
the output values of said light-receiving sensor that has  
received said light having been emitted.

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11. A liquid ejection control method according to claim 10,  
wherein said moving member is provided with said ejection  
head, and

wherein, while making said moving member move in the  
5 main-scanning direction,

said light is emitted from said light emitting member  
toward the plurality of different positions in the  
main-scanning direction, each of said plurality of  
different positions being said predetermined position in  
10 said feed direction,

whether or not said medium is present in said  
direction of travel of said light is determined based on  
the output values of said light-receiving sensor that has  
received said light having been emitted, and

15 liquid is ejected onto said medium from the nozzles  
provided in said ejection head.

12. A liquid ejection control method according to claim 11,  
wherein liquid is ejected with respect to an entire surface  
20 of said medium.

13. A liquid ejection control method according to claim 12,  
wherein said liquid is ink.

25 14. A liquid ejection control method according to claim 2,  
wherein said portion of said medium that is positioned on  
the upstream side in said feed direction is detected by determining  
whether or not said portion of said medium on the upstream side  
in said feed direction has passed a predetermined position in said  
30 feed direction,

wherein said predetermined distance is increased in correspondence with an increase of an aggregate paper feed amount of said medium to increase a number of said nozzles that are made not to eject said liquid, and

5        wherein, if the number of said nozzles that are made not to eject said liquid exceeds a number of predetermined nozzles among said plurality of nozzles, then the operation for ejecting liquid onto said medium is ended.

10    15.    A liquid ejection control method according to claim 14, wherein when it is determined that said portion of said medium on the upstream side in said feed direction has passed a predetermined position in said feed direction, liquid is not ejected from nozzles other than said predetermined nozzles among  
15    said plurality of nozzles.

16.    A liquid ejection control method according to claim 15, wherein said predetermined nozzles are in opposition to a recessed section of a medium support section that is provided with  
20    said recessed section and that is for supporting said medium.

17.    A liquid ejection control method according to claim 16, wherein said predetermined distance is an amount that is obtained by subtracting a predetermined amount from said  
25    aggregate paper feed amount.

18.    A liquid ejection control method according to claim 17, wherein, the higher a detection precision for detecting said position, in said feed direction, of said portion on the upstream  
30    side in said feed direction is, the smaller said predetermined

amount is.

19. A liquid ejection apparatus for ejecting liquid onto a medium, comprising:

5 a plurality of nozzles for ejecting the liquid;  
a movable ejection head provided with said plurality of nozzles; and

a feed mechanism for feeding the medium in a predetermined feed direction;

10 wherein a portion of said medium that is positioned on an upstream side in said feed direction is detected, and based on a result of said detection, nozzles, among said plurality of nozzles, that are positioned on the upstream side in said feed direction are made not to eject liquid therefrom.

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